

**EXCESSIVE RAINS IN LOUISIANA.**

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At this time when numerous large drainage and other engineering projects are being considered, the question of the amount and intensity of the rainfall, especially the falls for 24 hours or shorter periods, must be given serious consideration. The writer, therefore, believes that a tabulation of all monthly rainfalls of 10 inches or more and of all amounts of 4 inches or more in 24 hours in the State of Louisiana would be of interest and value.

In this connection some mention of excessive rainfall over the world in general seems to be pertinent. The greatest annual rainfall in the world occurs at Cherrapunji, India, where the average annual amount is 493.2 inches. At this station during August, 1841, 264 inches fell, and for five successive days the amount each 24 hours was 30 inches. In 1861, the total annual amount was 905.1 inches. On January 14, 1876, 40.6 inches fell in 24 hours, this being the greatest 24-hour rainfall of which there is record.

In the United States the greatest rainfall occurs along the coast of Washington and Oregon, and Gen. A. W. Greely terms Cape Flattery, the northwestern point of the United States, a maximum rain center. Some annual rainfalls in the United States exceeding 100 inches are as follows: Neah Bay, Wash., season 1865-66 (July, 1865, to June, 1866, inclusive), 140.9 inches; Tatoosh Island, Wash., 1886-87, 112.9 inches; Nevada City, Cal., 1867-68, 115.3 inches; Crescent City, Cal., 1881-82, 113.4 inches; Bowman's Dam, Cal., 1871-72, 102.2 inches; Astoria, Oreg., 1875-76, 112.5 inches; Point Pleasant, La., 1880-81, (10 months only), 102.4 inches; Baton Rouge, La., 1846, 116.4 inches; Donaldsonville, La., 1911, 124.1 inches (the greatest amount ever recorded in a calendar year in Louisiana) and for the 12 months, April, 1911, to March, 1912, inclusive, at Donaldsonville, La., 142.5 inches of rain fell; Mount Washington, N. H., 1879-80, 129.23 inches; Cape Lookout, 1877-78, 113.92 inches; and Cape Hatteras, 1877-78, 102.39 inches; Glenora, Oreg., 1893, 151.37 inches; 1896, 167.29 inches; 1897, 156.50 inches; 1902, 147.48 inches; Branscomb, Cal., 130.14 inches; Diamond, Ga., 1889, 101.67 inches.

Some excessive monthly rainfalls are as follows: Helen Mine, Cal., January, 1909, 71.54 inches; La Porte, Cal., January, 1909, 63.52 inches; Magalia, Cal., January, 1909, 64.77 inches; West Branch, Cal., January, 1909, 63.71 inches; Woodleaf, Cal., January, 1909, 63.08 inches; Upper Mattole, Cal., January, 1888, 41.63 inches; Alexandria, La., June, 1886, 36.9 inches; Fort Barrancas, Fla., August, 1878, 30.7 inches; Neah Bay, Wash., December, 1886, 30.7 inches; Brownsville, Tex., September, 1886, 30.6 inches; Baton Rouge, La., May, 1907, 23.73 inches; Cameron, La., September, 1908, 21.47 inches; Donaldsonville, La., August, 1911, 28.50 inches (three months, June, July, and August, 1911, total amount at Donaldsonville, 59.85 inches); Franklin, La., July, 1908, 29.28 inches; Lafayette, La., May, 1907, 22.74 inches; New Orleans, La., July, 1888, 22.74 inches; Rayne, La., May, 1907, 23.17 inches.

Twenty-four hour rainfalls of 10 inches or more occasionally occur in the United States, but they are exceptional. The most remarkable rainfall recorded in the United States during 24 hours is that which occurred at Alexandria, La., June 15-16, 1886, when 21.4 inches fell. This downpour was not entirely local, since 13.3

inches fell during the same time, a few miles to the southeastward at Cheneyville (see Greely's American Weather, p. 146). Other heavy 24-hour rainfalls are: Matagorda, Tex., April 30-May 1, 1911, 15.71 inches in 10 hours; Brownsville, Tex., September 21 and 22, 1886, 11.9 inches (September 21-23, 1886, 64½ hours, 23.14 inches); New Orleans, La., April 7 and 8, 1883, 9.22 inches; April 25, 1907, 8.76 inches; Memphis, Tenn., June 8 and 9, 1877, 9.7 inches; Brackettville, Tex., October 2, 1886, 11.0 inches; Point Pleasant, La., April 5, 1885, 12.3 inches; St. Francisville, La., September 21, 1909, 13.50 inches; Burrwood, La., April 3, 1897, 9.30 inches; Cameron, La., September 18, 1908, 14.25 inches.

Following this, in tabular form, are given the monthly amounts exceeding 10 inches for the principal stations in Louisiana, for all the years of record up to and including the records for April, 1912. All amounts of 4 inches, or more, in 24 hours, so far as the records were available at New Orleans, have been tabulated and are presented herewith. The excessive rainfall at New Orleans may be considered typical of southern Louisiana, hence it has been presented in somewhat more detail than has been done for other stations, the tables showing not only all monthly amounts of 10 inches, or more, but all dates on which 1 inch, or more, of precipitation occurred in one hour or less, with the amounts, and all dates on which 2.50 inches, or more, of precipitation occurred during 24 hours, with the amounts.

The writer trusts that these data will be of value to the drainage and other engineers, and if more detailed data are desired, the readers are referred to the publications of the Louisiana section of the Climatological Service of the Weather Bureau prior to July, 1909, and since that time to the Monthly Weather Review, Climatological District No. 7, published at Washington, D. C.

**ABBEVILLE, LA.**

(Vermilion Parish. Elevation, 18 feet.)

*Ten inches, or more, in one month.*—1891: January, 11.45 inches; July, 10.50 inches. 1892: June, 12.50 inches; July, 12.74 inches. 1895: July, 11.53 inches. 1897: April, 12.40 inches. 1898: June, 11 inches. 1903: July, 10.05 inches. 1905: June, 16.10 inches. 1907: May, 16.03 inches. 1908: July, 14.70 inches. 1910: June, 10.11 inches. 1911: July, 12.26 inches.

*Four inches, or more, in 24 hours.*—1894: March 19, 4 inches. 1895: November 23-24, 4.35 inches. 1897: April 2, 8.75 inches. 1898: January 18, 4.65 inches; September 28-29, 4.20 inches. 1900: April 16, 4.75 inches. 1901: December 29, 5.50 inches. 1905: February 11, 4 inches. 1908: May 15, 4.60 inches; July 29, 6.50 inches. 1909: April 8, 4.40 inches; September 21, 4.72 inches.

**ALEXANDRIA, LA.**

(Rapides Parish. Elevation, 77 feet.)

*Ten inches, or more, in one month.*—1886: June, 36.9 inches. 1889: June, 14.58 inches. 1890: April, 10.55 inches; June, 11.85 inches. 1891: January, 10.03 inches; February, 11.58 inches. 1892: July, 13.40 inches. 1896: February, 14.11 inches. 1897: December, 13.59 inches. 1899: January, 10.85 inches. 1900: June, 10.42 inches. 1901: September, 11.09 inches. 1903: February, 13.87 inches. 1905: April, 14.21 inches. 1907: May, 17.61 inches. 1911: July, 12.26 inches.

*Four inches, or more, in 24 hours.*—1886: June, 15-16, 21.4 inches. 1892: December 11, 4.90 inches. 1896: February 2, 5.20 inches. 1897: December 3, 4.37 inches. 1899: January 6, 6 inches; December 11, 4.90 inches. 1901: September 14, 6.51 inches. 1902: May 19, 4.85 inches. 1903: February 16, 4.40 inches. 1905: March 19, 4.09 inches; April 4, 7 inches. 1910: February 17-18, 4.20 inches; May 20, 4.43 inches.

**AMITE, LA.**

(Tangipahoa Parish. Elevation, 130 feet.)

*Ten inches, or more, in one month.*—1888: August, 16.16 inches. 1893: June, 10.56 inches. 1897: August, 10.62 inches. 1898: November,

10.89 inches. 1900: February, 12.60 inches; April, 17.42 inches. 1901, July, 15.83 inches. 1903: March, 16.34 inches. 1905: February, 12.30 inches. 1906: July, 10.66 inches. 1907: May, 17.06 inches. 1908: May, 16.55 inches; July, 14.75 inches. 1909: April, 10.99 inches; May 10, inches. 1910: June, 11.14 inches. 1911: July, 10.34 inches; December, 10.95 inches. 1912: March, 10.25 inches; April, 15.47 inches.

*Four inches, or more, in 24 hours.*—1897: August 19, 4.10 inches. 1898: February 11, 4.30 inches. 1899: June 11, 4 inches. 1900: February 4, 4.20 inches; April 17, 8 inches; April 23, 4.05 inches. 1901: April 18, 4 inches. 1903: March 4, 4.10 inches; March 8-9, 7.90 inches. 1905: March 19, 4.50 inches; April 25, 6.25 inches; May 15-16, 4.75 inches; October 15, 4 inches. 1906: March 12-13, 4 inches. 1907: February 28, 4.85 inches. 1908: May 17, 6.64 inches. 1910: June 5, 4 inches. 1911: January 2, 5.05 inches. 1912: April 17, 5.80 inches.

## BATON ROUGE, LA.

(East Baton Rouge Parish. Elevation, 60 feet.)

*Ten inches, or more, in one month.*—1846: March 12.30 inches; April, 17.20 inches; May, 13.20 inches; June, 16 inches; July, 14.40 inches; August, 15.90 inches. 1847: January, 11.60 inches. 1848: July, 11.80 inches; August, 12.10 inches. 1849: July, 10.92 inches. 1850: January, 16.02 inches. 1853: July, 11.18 inches. 1855: December, 10.10 inches. 1856: August, 14.05 inches. 1858: December, 11.73 inches. 1874: April, 14.18 inches. 1875: February, 11.60 inches. 1876: March, 13.20 inches. 1877: September, 18.42 inches; October, 16.75 inches. 1888: August, 12.30 inches. 1891: July, 11.44 inches. 1893: May, 10.68 inches. 1897: August, 10.70 inches. 1898: July, 10.76 inches. 1900: April, 10.85 inches. 1903: March, 10.74 inches. 1905: March 11.12 inches. 1906: July, 10.04 inches. 1907: May 23.73 inches. 1908: May, 15.62 inches; July 14.23 inches; August 10.01 inches. 1911: July, 15.92 inches.

*Four inches, or more, in 24 hours.*—1893: May 9, 4.67 inches; September 7, 4.21 inches. 1898: September 19, 4.04 inches. 1900: January 10, 4.93 inches; April 17, 4.65 inches. 1905: February 12, 5.10 inches. 1907: April 8, 8.10 inches. 1908: May 16, 6.60 inches; May 17, 6.30 inches. 1909: September 21, 5 inches. 1912: April 17, 4.05 inches.

## BURRWOOD, LA.

(Plaquemines Parish. Elevation, 1 foot.)

*Ten inches, or more, in one month.*—1881: July, 10.44 inches; August, 14.16 inches; December, 11.28 inches. 1882: July, 13.68 inches. 1888: August, 13.48 inches. 1890: July, 10.58 inches. 1892: July, 14 inches. 1895: May, 10.27 inches. 1896: September, 10.69 inches. 1897: April, 11.70 inches. 1898: August, 13.39 inches; September, 18.44 inches; October, 13.47 inches. 1900: September, 10.13 inches. 1901: July, 11.29 inches; August, 14.74 inches. 1904: August, 13.31 inches. 1905: August, 10.81 inches. 1908: July, 12.90 inches; September, 14.27 inches. 1909: June, 14.62 inches; August, 13.72 inches. 1910: July, 11.48 inches; August, 10.43 inches.

*Four inches, or more, in 24 hours.*—1888: August 15, 5.70 inches. 1894: August 9, 4.26 inches. 1895: May 24, 4.50 inches. 1897: April 3, 9.30 inches; September 5, 5.16 inches. 1898: September 10, 4.75 inches; October 1, 11.33 inches. 1901: August 16, 7.64 inches. 1902: February 19, 4.95 inches. 1907: May 31, 4.08 inches. 1908: June 19, 4.30 inches. 1909: August 23, 5.22 inches. 1910: August 4, 4.50 inches.

## CALHOUN, LA.

(Ouachita Parish. Elevation, 180 feet.)

*Ten inches, or more, in one month.*—1892: April, 10.06 inches. 1895: June, 13.15 inches. 1900: April, 11.89 inches. 1903: February, 10.12 inches; July, 10.66 inches. 1906: July, 11.11 inches. 1908: February, 11 inches; May, 12.03 inches. 1911: December, 16.17 inches.

*Four inches, or more, in 24 hours.*—1893: April 14, 4.46 inches. 1900: April 16, 6.44 inches. 1904: December 24, 4.40 inches; December 26, 4.97 inches. 1906: July 21, 5.45 inches.

## CAMERON, LA.

(Cameron Parish. Elevation, 6 feet.)

*Ten inches, or more, in one month.*—1892: June, 17.83 inches; July, 14.80 inches. 1894: August, 11.90 inches; September, 10.45 inches. 1895: June, 11.94 inches; November, 10.10 inches. 1897: January, 10.73 inches. 1901: September, 10.49 inches. 1905: June, 13.62 inches. 1906: July, 12.44 inches. 1907: May, 13.27 inches. 1908: July, 11.96 inches; September, 24.28 inches. 1911: July, 15.72 inches.

*Four inches, or more, in 24 hours.*—1893: July 15, 4 inches. 1894: September, 11-12, 4.30 inches. 1895: November 23, 5.20 inches. 1897: January 1, 7.65 inches. 1901: September 2, 4.17 inches. 1905: June 22, 5.78 inches; July 6, 7.15 inches. 1906: July 13, 4.57 inches; October 14, 6.40 inches. 1907: May 1, 4 inches. 1908: May 16, 6.52 inches; June 14-15, 4.12 inches; September 18, 14.25 inches. 1909:

April 8, 4.84 inches. 1910: August 1, 5.12 inches. 1911: July 6, 6 inches; July 7, 4.02 inches; October 16, 4.05 inches.

## CHENEYVILLE, LA.

(Rapides Parish. Elevation, 67 feet.)

*Ten inches, or more, in one month.*—1882: July, 11.35 inches. 1884: December, 11.93 inches. 1886: June, 26.59 inches. 1889: June, 10.19 inches. 1890: April, 13.15 inches. 1891: July, 13.11 inches. November, 11.14 inches. 1892: March, 10.71 inches; July, 11.53 inches. 1893: May, 12.57 inches. 1898: September, 10.10 inches. 1900: April, 14.36 inches; June, 10.93 inches. 1903: February, 13.28 inches; March, 11.59 inches. 1905: April, 12.97 inches. 1907: May, 20.98 inches. 1911: July, 13.53 inches; December, 14.85 inches.

*Four inches, or more, in 24 hours.*—1893: May, 1, 4.20 inches. 1886: June 15-16, 13.30 inches. 1898: September 30, 7.50 inches. 1900: April 16, 5.90 inches. 1903: February 15, 4.20 inches. 1905: March 29, 4.05 inches. 1907: May 30, 6.80 inches. 1908: February 12, 4 inches. 1910: August 19, 4 inches. 1911: January 1, 6 inches.

## CLINTON, LA.

(East Feliciana Parish. Elevation, 113 feet.)

*Ten inches, or more, in one month.*—1888: August, 14.05 inches. 1890: June, 12.32 inches. 1891: July, 14.40 inches. 1898: July, 11.99 inches. 1900: April, 15.97 inches. 1901: July, 10.04 inches; December, 11.83 inches. 1903: March, 21.47 inches. 1905: February, 13.44 inches. April, 13.23 inches; July, 12.77 inches. 1906: March, 16.18 inches. 1907: May, 18.04 inches. 1908: July, 11.07 inches. 1911: July, 10.99 inches.

*Four inches, or more, in 24 hours.*—1899: January 6, 4.10 inches. 1900: February 3, 4.70 inches; April 10, 4.05 inches; April 16, 5.78 inches; May 17, 4.07 inches. 1901: December 29, 5.84 inches. 1903: March 3, 8.50 inches. 1905: February 12, 4.53 inches; April 4, 4.04 inches; July 18, 7.30 inches; September 30, 4.20 inches. 1906: March 19, 5.48 inches; March 29, 4.51 inches. 1909: September 21, 5.90 inches. 1911: January 2, 4.45 inches.

## COLLINGTON, LA.

(Morehouse Parish. Elevation, 65 feet.)

*Ten inches, or more, in one month.*—1902: March, 11.45 inches. 1904: December, 13.40 inches. 1906: September, 10.54 inches. 1908: February, 11.22 inches. 1911: December, 18.35 inches.

*Four inches, or more, in 24 hours.*—1904: December 24, 4.45 inches; December 27, 6.40 inches. 1906: September 26, 4.55 inches.

## COVINGTON, LA.

(St. Tammany Parish. Elevation, 39 feet.)

*Ten inches, or more, in one month.*—1898: August, 13.76 inches; September, 14.65 inches. 1900: June, 14.18 inches. 1901: July, 10.80 inches; August, 10.61 inches. 1905: March, 10.44 inches; April, 12.03 inches; July, 14.57 inches; October, 10.06 inches. 1906: March, 10.84 inches. 1907: April, 10.07 inches; May, 15.08 inches. 1908: July, 14.97 inches. 1912: April, 15.74 inches.

*Four inches, or more, in 24 hours.*—1895: August 16, 4.20 inches. 1900: June 16, 4.55 inches. 1901: January 13, 4.50 inches. 1905: January 12, 4.80 inches; February 12, 4.14 inches; March 19, 4.53 inches; April 25, 9 inches; July 18, 6.03 inches; October 9, 4.17 inches. 1912: April 13, 4 inches.

## DONALDSONVILLE, LA.

(Ascension Parish. Elevation, 33 feet.)

*Ten inches, or more, in one month.*—1888: February, 11.63 inches; August, 15.83 inches. 1890: August, 10.27 inches. 1893: September, 11.39 inches. 1894: February, 10.15 inches. 1897: April, 11.08 inches; September, 14.20 inches; November, 12.93 inches. 1900: December, 10.45 inches. 1903: February, 10.19 inches. 1906: July, 10.16 inches. 1907: May, 16.80 inches. 1908: July, 15.41 inches. 1909: June, 11.25 inches. 1910: June, 10.42 inches; September, 10.37 inches. 1911: April, 12.45 inches; June, 13.64 inches; July, 14.71 inches; August, 28.50 inches; December, 11.40 inches. 1912: January, 10.65 inches; March, 16.58 inches.

*Four inches, or more, in 24 hours.*—1893: June 19, 4.03 inches; September 7, 7.74 inches. 1897: April 3, 4 inches; November 28, 4.40 inches. 1898: September 20, 6.25 inches. 1899: June 10, 5 inches. 1900: April 22, 4 inches; December 27, 4 inches. 1901: January 18, 4.45 inches. 1907: February 28, 6.53 inches; May 8, 4.25 inches; October 3, 6.37 inches. 1909: April 8, 4.25 inches; September 21, 4.60 inches. 1910: December 23, 5.10 inches. 1911: January 2, 7.20 inches; April 12, 4.30 inches; May 1, 6 inches; June 23, 4 inches; August 2, 6.55 inches; August 12, 6.15 inches; October 12, 5.50 inches. December 31, 4.50 inches. 1912: March 11-12, 5.20 inches; March 24, 5.10 inches.

## FARMERVILLE, LA.

(Union Parish. Elevation, 177 feet.)

*Ten inches, or more, in one month.*—1892: April, 10 inches. 1900: April, 12.44 inches. 1902: March, 14.34 inches. 1904: December, 10.87 inches. 1903: May, 12.48 inches. 1909: April, 10.71 inches. 1911: December, 14.48 inches. 1912: March, 11.11 inches.

*Four inches, or more, in 24 hours.*—1893: April 14, 4.20 inches. 1896: November 26–27, 4.09 inches. 1898: November 9, 4.20 inches. 1899: March 13, 4.14 inches. 1900: April 16, 4.20 inches. 1904: December 26, 5.40 inches. 1908: May 13, 4.04 inches.

## FRANKLIN, LA.

(St. Mary Parish. Elevation, 10 feet.)

*Ten inches, or more, in one month.*—1892: June, 13.87 inches; July, 13.88 inches. 1893: September, 14.01 inches. 1894: August, 11.11 inches. 1895: July, 11.27 inches. 1898: August, 11.60 inches; September, 17.46 inches. 1900: April, 11.06 inches; August, 11.26 inches. 1901: July, 12.95 inches; August, 10.20 inches. 1904: July, 10.06 inches. 1905: June, 11.70 inches; July, 11.50 inches. 1906: July, 13.84 inches. 1907: May, 15.29 inches. 1908: July, 29.28 inches; September, 14.21 inches. 1909: June, 11.62 inches. 1910: July, 10.89 inches. 1911: July, 14.33 inches; August, 18.79 inches.

*Four inches, or more, in 24 hours.*—1894: July 30, 4 inches; August, 14, 5.23 inches. 1895: April 27, 4.52 inches. 1896: November 29, 4.26 inches. 1898: September 20, 8.02 inches. 1900: April 23, 5.67 inches. 1901: July 24, 5.90 inches. 1903: February 9–10, 5.65 inches. 1905: April 25, 6.10 inches; June 25, 4.73 inches; July 10, 4.98 inches. 1908: July 29, 4.50 inches; July 30, 9.60 inches; September 19, 9.15 inches. 1909: April 8, 5 inches; September 21, 5.40 inches. 1911: August 14, 4.54 inches.

## GRAND CANE, LA.

(De Soto Parish. Elevation, 302 feet.)

*Ten inches, or more, in one month.*—1904: December, 10.60 inches. 1905: April, 15.27 inches; July, 11.14 inches. 1911: December 12.62 inches. 1912: March, 10.41 inches.

*Four inches, or more, in 24 hours.*—None has occurred since the beginning of records, in 1904.

## HAMMOND, LA.

(Tangipahoa Parish. Elevation, 44 feet.)

*Ten inches, or more, in 24 hours.*—1890: April, 11.16 inches. 1892: April, 10.63 inches. 1894: July, 10.46 inches. 1897: August, 13.46 inches; December, 10.81 inches. 1898: August, 10.78 inches; September, 11.65 inches. 1900: January, 10.68 inches; April, 10.55 inches. 1903: March, 10.15 inches. 1910: July, 12.48 inches.

*Four inches, or more, in 24 hours.*—1897: August 18, 4.45 inches. 1898: September 20, 4.36 inches; September 29, 4.20 inches. 1900: January 10, 5.23 inches; January 11, 4.53 inches. 1903: February 10, 4.25 inches; July 12, 5.50 inches. 1905: February 11, 4.32 inches; April 24–25, 4.14 inches. 1906: March 14, 4.30 inches.

## HOUMA, LA.

(Terrebonne Parish. Elevation, 24 feet.)

*Ten inches, or more, in one month.*—1889: July, 10.49 inches. 1890: June, 12.12 inches. 1891: February, 10.87 inches; July, 10.58 inches. 1892: July, 19.71 inches. 1894: February, 10.36 inches. 1895: July, 12.45 inches. 1897: April, 10.64 inches. 1898: September, 18.70 inches. 1900: April, 10.25 inches; June, 11.16 inches; July, 11.31 inches; December, 12.02 inches. 1903: August, 11.12 inches. 1905: August, 10.52 inches; October, 11.62 inches. 1906: July, 11.62 inches; September, 10.59 inches. 1907: May, 13.45 inches. 1908: July, 19.59 inches; September, 15 inches. 1909: June, 12.68 inches. 1910: July, 15.81 inches. 1911: July, 11.90 inches; August, 12.27 inches.

*Four inches, or more, in 24 hours.*—1893: April 18–19, 4.72 inches. 1894: February 23, 4.50 inches; June 12, 6 inches; July 29, 4.60 inches. 1897: April 3, 6.01 inches. 1899: October 11, 4.15 inches. 1900: April 24, 7.40 inches. 1902: March 14, 4.04 inches. 1905: October 8, 8.32 inches. 1907: May 10, 4.66 inches. 1903: July 30, 5.41 inches.

## JENNINGS, LA.

(Calcasieu Parish. Elevation, 30 feet.)

*Ten inches, or more, in one month.*—1898: September, 13.85 inches. 1899: January, 14.01 inches. 1900: June, 11.20 inches. 1902: September, 10.94 inches. 1903: March, 10.75 inches. 1905: June, 10.75

inches. 1907: May, 21.73 inches; October, 14.26 inches. 1908: July, 10.57 inches. 1909: August, 11.42 inches. 1911: July, 13.03 inches; December, 12.04 inches.

*Four inches, or more, in 24 hours.*—1898: January 18, 4.46 inches; September 28, 9.05 inches. 1899: January 5, 5.65 inches; May 22, 4.10 inches. 1900: December 22, 6 inches. 1902: September 28, 4.05 inches. 1906: June 26, 4.59 inches. 1907: May 23, 4.17 inches; October 30–31, 6.33 inches. 1909: August 2, 4.28 inches.

## LA FAYETTE, LA.

(Lafayette Parish. Elevation, 36 feet.)

*Ten inches, or more, in one month.*—1889: June, 12.40 inches. 1891: July, 12.03 inches. 1892: June, 13.97 inches; July, 13.12 inches. 1898: June, 13.01 inches; August, 10.99 inches; September, 12.20 inches. 1900: July, 12.65 inches. 1903: July, 11 inches. 1905: February, 10.26 inches; June, 18.52 inches. 1907: May, 22.74 inches. 1908: July, 13.17 inches. 1910: July, 10.90 inches. 1911: July, 11.09 inches; December, 11.83 inches.

*Four inches, or more, in 24 hours.*—1896: October 27, 4 inches. 1898: September 30, 4.10 inches. 1905: February 12, 4.52 inches; April 25, 5.07 inches; June 23, 4.87 inches; June 26, 5.50 inches. 1907: May 8, 9.09 inches; May 10, 4.09 inches. 1908: July 31, 4.22 inches. 1909: September 21, 5.09 inches.

## LAKE CHARLES, LA.

(Calcasieu Parish. Elevation, 22 feet.)

*Ten inches, or more, in one month.*—1891: January, 13.20 inches. 1892: June, 13.50 inches; July, 14.20 inches. 1893: August, 11.25 inches. 1894: June, 10.08 inches; August, 10.50 inches. 1895: June, 11.94 inches; November, 12.57 inches. 1897: January, 10.95 inches. 1899: January, 12.32 inches. 1900: June, 10.10 inches; October, 10.50 inches. 1903: February, 11.10 inches. 1904: July, 10.85 inches. 1906: July, 11.56 inches; October, 10.60 inches. 1907: May, 21.45 inches. 1908: July, 11.45 inches. 1909: August, 10.12 inches. 1910: June, 10.11 inches; July, 11.89 inches; August, 10.63 inches. 1911: November, 15.65 inches.

*Four inches, or more, in 24 hours.*—1893: March 20, 6 inches; May 2, 4 inches; August 1, 4 inches. 1895: November 23–24, 10 inches. 1897: January 1, 4 inches. 1898: January 19, 4 inches. 1900: June 3, 4.90 inches; October 25, 7 inches. 1903: June 9–10, 4.93 inches. 1905: June 23, 4.03 inches. 1906: October 5, 4 inches; October 15, 4 inches. 1907: May 30, 4.30 inches; October 30–31, 5.30 inches. 1910: July 12–13, 4.18 inches; August 14–15, 4.89 inches. 1911: January 2–3, 4.20 inches.

## LAKESIDE, LA.

(Cameron Parish. Elevation, 9 feet.)

*Ten inches, or more, in one month.*—1905: June, 11.01 inches. 1906: July, 11.61 inches. 1907: May, 20.07 inches. 1908: July, 11.99 inches. 1910: June, 15.03 inches; July, 12.30 inches. 1911: December, 10.64 inches.

*Four inches, or more, in 24 hours.*—1902: May 13, 4.05 inches. 1903: September 12, 7.20 inches. 1905: July 6, 4.10 inches. 1907: May 7, 5.30 inches; May 23, 4.60 inches; September 16, 4.35 inches; November 20, 4.43 inches. 1910: June 29, 4 inches.

## LAWRENCE, LA.

(Plaquemines Parish. Elevation, 6 feet.)

*Ten inches, or more, in one month.*—1892: July, 12.33 inches. 1898: August, 10.27 inches; September, 15.29 inches. 1899: June, 10.91 inches. 1900: July, 12.38 inches. 1901: July, 10.82 inches; August, 10.26 inches. 1903: July, 10.31 inches. 1907: May, 10.05 inches; September, 15.63 inches. 1908: July, 12.32 inches; August, 14.80 inches; September, 18.01 inches. 1911: April, 11.97 inches; August, 12.31 inches; December, 16.66 inches.

*Four inches, or more, in 24 hours.*—1894: April 24–25, 4.50 inches; August 9, 5.27 inches. 1895: May 24, 4.45 inches; July 20, 4.55 inches. 1898: February 17, 5.76 inches. 1901: April 17, 4 inches. 1908: July 30, 4.40 inches; August 10, 4 inches. 1909: June 3, 4.65 inches. 1911: December 20, 5.80 inches; December 23, 6.04 inches. 1912: January 9, 5.07 inches.

## LIBERTY HILL, LA.

(Bienville Parish.)

*Ten inches, or more, in one month.*—1887: July, 11.15 inches. 1889: June, 10.35 inches. 1895: June, 10.46 inches. 1897: December, 10.17 inches. 1904: December, 14.09 inches. 1905: July, 10 inches. 1911: December, 13.01 inches. 1912: March, 11.74 inches.

*Four inches, or more, in 24 hours.*—1894: March 19, 4.40 inches. 1896: April 12, 4 inches. 1897: October 30, 5.01 inches. 1899: March 13, 4.40 inches. 1901: January 10, 4 inches. 1904: December 23, 4.25 inches; December 26, 9.51 inches. 1907: July 12, 6.02 inches.

## LOGANSFORT, LA.

(De Soto Parish. Elevation, 192 feet.)

*Ten inches, or more, in one month.*—1904: December, 10.60 inches. 1905: July, 15.93 inches. 1907: November, 10.32 inches. 1911: April, 12.61 inches; December, 11.34 inches.

*Four inches, or more, in 24 hours.*—1907: November 19–20, 5.10 inches.

## MELVILLE, LA.

(St. Mary Parish. Elevation, 45 feet.)

*Ten inches, or more, in one month.*—1886: April, 10.10 inches. 1890: April, 12.45 inches. 1891: January, 12.36 inches. July, 10.38 inches. 1897: August, 10.70 inches. 1900: April, 10.98 inches. 1903: March, 15.68 inches. 1904: July, 11.63 inches. 1905: February, 10.11 inches; April, 18.90 inches. 1906: March, 15.63 inches; July, 10.30 inches. 1907: May, 19.90 inches. 1908: August, 10.05 inches. 1910: 10 inches. 1911: April, 11 inches; December, 13.67 inches.

*Four inches, or more, in 24 hours.*—1893: May 7–8, 4.04 inches. 1894: March 16, 4 inches. 1896: May 3, 4.50 inches. 1897: August 18, 4 inches. 1899: December 11, 5 inches. 1900: February 4, 4.20 inches. 1903: March 3, 4.40 inches. 1905: April 25, 6.60 inches; April 30, 6.10 inches. 1906: March 14, 4.70 inches; March 19, 5.60 inches; October 5–6, 4.02 inches. 1908: May 17, 4.95 inches. 1909: February 15, 4 inches; September 21, 6.90 inches. 1911: April 11–12, 5.30 inches.

## MINDEN, LA.

(Webster Parish. Elevation, 194 feet.)

*Ten inches, or more, in one month.*—1890: September, 10.63 inches. 1892: April, 10.44 inches; December, 10.50 inches. 1904: December, 10.66 inches. 1905: April, 11.21 inches; July, 11.27 inches. 1908: May, 14.73 inches. 1911: April, 12.65 inches; August, 10.70 inches; December, 15.17 inches. 1912: March, 11.22 inches.

*Four inches, or more, in 24 hours.*—1904: December 27, 6.30 inches. 1905: July 24, 5 inches; August 14, 5 inches. 1908: May 13, 4.35 inches. 1910: August 13, 4 inches.

## MONROE, LA.

(Ouachita Parish. Elevation, 82 feet.)

*Ten inches, or more, in one month.*—1886: January, 10.17 inches. 1887: July, 12.27 inches. 1890: June, 11.84 inches. 1892: April, 10.63 inches. 1894: 10.48 inches. 1897: December, 10.92 inches. 1904: December, 11.03 inches. 1906: July, 12.20 inches. 1909: May, 10.33 inches. 1911: December, 18.21 inches. 1912: March, 10.35 inches.

*Four inches or more in 24 hours.*—1894: March 19–20, 5.65 inches. 1904: December 24, 4 inches; December 27, 4.70 inches.

## NATCHEZ, MISS.

(Adams County. Elevation, 206 feet.)

*Ten inches, or more, in one month.*—1890: March, 10.05 inches. 1891: March, 10 inches; November, 10.30 inches. 1892: March, 10.40 inches. 1899: January, 11.05 inches. 1900: April, 19.15 inches. 1903: February, 14.25 inches. 1904: July, 10.53 inches. 1906: March, 12.01 inches. 1907: May, 16.61 inches. 1908: February, 11.41 inches. 1909: May, 10.85 inches. 1910: May, 11.64 inches. 1911: July, 15.50 inches; December, 17.51 inches.

*Four inches, or more, in 24 hours.*—1896: February 2, 5.50 inches. 1899: December 11, 4 inches. 1900: April 16, 6 inches; April 17, 6.75 inches; November 20, 5.75 inches. 1901: January 10, 5 inches. 1903: February 16, 5 inches. 1905: December 22, 6 inches. 1906: March 19, 6.14 inches. 1907: May 15, 6.24 inches. 1909: May 26–27, 4.63 inches; June 1–2, 4.24 inches.

## NEW IBERIA, LA.

(Iberia Parish. Elevation, 15 feet.)

*Ten inches, or more, in one month.*—1886: April, 10.34 inches; June, 12.52 inches. 1888: August 12.73 inches. 1891: July, 10.01 inches. 1892: June, 10.09 inches; July, 13.12 inches. 1898: June, 13.10 inches; August, 10.99 inches. 1899: June, 10.90 inches. 1900: August, 12.65 inches. 1901: April, 10.30 inches. 1905: June, 12.75

inches; July, 10.58 inches. 1906: July, 11.27 inches. 1907: May, 17.22 inches. 1908: July, 20.85 inches. 1909: June, 10.35 inches; September, 10.60 inches. 1911: July, 12.84 inches.

*Four inches, or more, in 24 hours.*—1892: May 9, 4.30 inches; June 22, 4.77 inches. 1893: September 7, 5 inches. 1896: April 14, 7.90 inches. 1898: January 18, 5.15 inches. 1899: June 5, 4.35 inches. 1900: August 6, 6.50 inches. 1901: April 17, 6 inches. 1908: July 29, 5.05 inches; July 30, 6.85 inches. 1909: September 20, 6.50 inches. 1911: June 22, 6.20 inches.

## NEW ORLEANS, LA.

(Orleans Parish. Elevation, 51 feet.)

*Ten inches, or more, in one month.*—1843: June, 14.57 inches. 1846: April, 10.70 inches. 1849: July, 12.92 inches. 1853: July, 11.51 inches; August, 16.12 inches. 1868: July, 15.51 inches; October, 13.36 inches; December, 10.24 inches. 1873: May, 18.68 inches. 1874: April, 13.62 inches; July, 12.93 inches. 1875: February, 13.85 inches; March, 10.84 inches. 1876: March, 11.32 inches. 1877: September, 13.31 inches. 1879: August, 10.44 inches. 1880: July, 11.22 inches. 1881: January, 11.15 inches. 1883: January, 10.63 inches; April, 14.20 inches; June, 12.05 inches. 1885: September, 13.55 inches. 1887: June, 11.33 inches. 1888: March, 11.21 inches; August, 22.74 inches. 1892: April, 10.44 inches. 1894: February, 11.06 inches; July, 11.51 inches. 1898: September, 13.90 inches. 1900: April, 10.69 inches. 1901: July, 10.71 inches. 1903: February, 10.20 inches; March, 14.61 inches. 1905: September, 11.09 inches; December, 14.43 inches. 1907: April, 13.18 inches; May, 14.74 inches. 1908: July, 11.03 inches; September, 10.70 inches. 1911: April, 13.76 inches. 1912: March, 10.81 inches.

Dates on which 1 inch or more of precipitation occurred in 1 hour or less at New Orleans, La., 1871 to 1911, inclusive:

|                                 |       |                                      |      |
|---------------------------------|-------|--------------------------------------|------|
| 1871—June 30 (1 hour).....      | 1.10  | 1896—Sept. 2 (1 hour 20 minutes).... | 2.15 |
| July 31 (1 hour).....           | 1.16  | Oct. 27 (1 hour).....                | 1.00 |
| 1872.....                       | None. | 1897—July 17 (1 hour).....           | 1.32 |
| 1873—May 20 (1 hour).....       | 1.47  | 1898—June 28 (1 hour).....           | 1.00 |
| 1874.....                       | None. | July 7 (1 hour).....                 | 1.21 |
| 1875.....                       | None. | Aug. 3 (30 minutes).....             | 1.01 |
| 1876.....                       | None. | Aug. 5 (1 hour).....                 | 1.80 |
| 1877.....                       | None. | Sept. 10 (1 hour).....               | 1.60 |
| 1878.....                       | None. | Nov. 9 (1 hour).....                 | 1.09 |
| 1879—Apr. 16 (1 hour).....      | 1.00  | 1899—Mar. 30 (42 minutes).....       | 1.44 |
| Aug. 13 (1 hour).....           | 1.00  | July 25 (1 hour).....                | 1.32 |
| 1880—Aug. 3 (1 hour).....       | 1.17  | 1900—Feb. 12 (45 minutes).....       | 1.00 |
| 1881—June 6 (1 hour).....       | 1.30  | Apr. 17 (27 minutes).....            | 1.18 |
| July 3 (1 hour).....            | 2.48  | June 19 (32 minutes).....            | 1.11 |
| 1882—July 16 (1 hour).....      | 1.30  | July 18 (32 minutes).....            | 1.04 |
| 1883.....                       | None. | Oct. 7 (1 hour).....                 | 1.14 |
| 1884—July 4 (1 hour).....       | 1.00  | Dec. 28 (55 minutes).....            | 1.02 |
| Oct. 21 (1 hour).....           | 1.00  | 1901—Apr. 17 (1 hour).....           | 1.56 |
| 1885.....                       | None. | June 4 (1 hour).....                 | 1.08 |
| 1886.....                       | None. | July 15 (22 minutes).....            | 1.19 |
| 1887.....                       | None. | July 18 (23 minutes).....            | 1.50 |
| 1888—Feb. 23 (1 hour).....      | 1.27  | July 19 (1 hour).....                | 2.07 |
| May 24 (1 hour).....            | 1.25  | Aug. 22 (1 hour).....                | 1.01 |
| June 6 (1 hour).....            | 2.00  | Sept. 16 (1 hour).....               | 1.48 |
| Aug. 20 (1 hour; estimated).... | 3.00  | Nov. 22 (1 hour).....                | 1.67 |
| Aug. 24 (1 hour).....           | 2.56  | 1902—July 12 (22 minutes).....       | 1.06 |
| Oct. 22 (1 hour).....           | 2.00  | July 15 (1 hour).....                | 2.00 |
| 1889—June 26 (1 hour).....      | 1.19  | Aug. 3 (1 hour).....                 | 1.34 |
| June 30 (1 hour).....           | 1.50  | Sept. 22 (1 hour).....               | 1.05 |
| July 6 (15 minutes).....        | 1.40  | Nov. 25 (1 hour).....                | 1.05 |
| July 6 (1 hour).....            | 1.85  | Dec. 15 (1 hour).....                | 1.07 |
| July 9 (1 hour).....            | 1.04  | 1903—Feb. 13 (1 hour).....           | 1.71 |
| July 12 (1 hour).....           | 1.20  | Mar. 14 (1 hour).....                | 2.74 |
| July 13 (30 minutes).....       | 1.15  | Mar. 14 (2 hours 18 minutes)....     | 5.75 |
| Sept. 25 (30 minutes).....      | 1.39  | June 22 (28 minutes).....            | 1.42 |
| 1890—Apr. 17 (45 minutes).....  | 1.70  | July 4 (36 minutes).....             | 1.33 |
| June 22 (30 minutes).....       | 1.25  | Aug. 22 (20 minutes).....            | 1.09 |
| July 7 (30 minutes).....        | 1.00  | Aug. 22 (29 minutes).....            | 1.41 |
| Sept. 10 (1 hour).....          | 1.05  | Aug. 25 (20 minutes).....            | 1.00 |
| Oct. 15 (1 hour).....           | 1.50  | Aug. 30 (42 minutes).....            | 1.00 |
| Dec. 25 (1 hour).....           | 1.25  | Sept. 12 (45 minutes).....           | 1.00 |
| 1891.....                       | None. | 1904—Mar. 17 (53 minutes).....       | 2.14 |
| 1892—Apr. 21 (2 hours).....     | 2.90  | May 7 (45 minutes).....              | 1.09 |
| Apr. 22 (1 hour).....           | 1.06  | June 7 (27 minutes).....             | 1.00 |
| May 9 (1 hour).....             | 1.13  | June 27 (34 minutes).....            | 1.30 |
| July 7 (1 hour).....            | 1.26  | July 6 (20 minutes).....             | 1.08 |
| Aug. 16 (1 hour).....           | 1.07  | July 11 (38 minutes).....            | 1.81 |
| 1893—Apr. 19 (1 hour).....      | 1.40  | Aug. 25 (45 minutes).....            | 2.18 |
| Nov. 26 (2 hours).....          | 2.00  | 1905—Mar. 19 (1 hour 9 minutes)....  | 2.01 |
| Dec. 12 (45 minutes).....       | 1.00  | Apr. 24–25 (1 hour).....             | 1.21 |
| 1894—Apr. 24 (55 minutes).....  | 2.18  | June 4 (1 hour).....                 | 1.08 |
| July 14 (52 minutes).....       | 1.75  | June 21 (1 hour).....                | 1.02 |
| July 16 (1 hour).....           | 1.37  | Sept. 6 (1 hour).....                | 1.52 |
| Aug. 13 (1 hour).....           | 1.70  | Sept. 7 (1 hour).....                | 1.00 |
| Aug. 18 (50 minutes).....       | 1.13  | Sept. 30 (1 hour).....               | 2.44 |
| 1895—Jan. 7 (1 hour).....       | 1.12  | Nov. 9 (1 hour).....                 | 1.00 |
| Apr. 2 (1 hour).....            | 1.23  | Dec. 2 (1 hour).....                 | 1.05 |
| May 24 (1 hour).....            | 1.10  | Dec. 14 (1 hour).....                | 1.53 |
| June 9 (1 hour).....            | 1.25  | Dec. 28 (1 hour).....                | 1.00 |
| June 18 (50 minutes).....       | 1.44  | 1906—Mar. 14 (1 hour).....           | 1.17 |
| 1896—Mar. 10 (1 hour).....      | 1.09  | July 11 (1 hour).....                | 1.60 |
| Mar. 18 (1 hour).....           | 1.55  | July 18 (1 hour).....                | 1.00 |
| Apr. 9 (1 hour).....            | 1.67  | Aug. 1 (1 hour).....                 | 1.07 |
| Apr. 14 (1 hour).....           | 1.11  | Aug. 12 (1 hour).....                | 1.07 |
| June 21 (1 hour).....           | 1.14  | Sept. 25 (1 hour).....               | 1.00 |

|                             |      |                             |      |
|-----------------------------|------|-----------------------------|------|
| 1906—Sept. 25 (1 hour)..... | 1.00 | 1909—Sept. 20 (1 hour)..... | 1.02 |
| 1907—Apr. 25 (1 hour).....  | 1.45 | Oct. 19 (1 hour).....       | 1.22 |
| Apr. 25 (1 hour).....       | 1.00 | Dec. 12 (1 hour).....       | 1.00 |
| Apr. 25 (1 hour).....       | 1.18 | 1910—Mar. 10 (1 hour).....  | 2.24 |
| May 9 (1 hour).....         | 1.22 | June 24 (1 hour).....       | 2.46 |
| May 23 (1 hour).....        | 1.48 | June 26 (1 hour).....       | 3.08 |
| May 30 (1 hour).....        | 1.91 | July 4 (1 hour).....        | 1.42 |
| May 31 (1 hour).....        | 1.05 | July 19 (1 hour).....       | 1.40 |
| July 10 (1 hour).....       | 1.23 | Aug. 5 (1 hour).....        | 1.79 |
| July 11 (1 hour).....       | 1.80 | Aug. 25 (1 hour).....       | 1.16 |
| Aug. 5 (1 hour).....        | 1.08 | Nov. 27 (1 hour).....       | 1.40 |
| Dec. 22 (1 hour).....       | 1.36 | 1911—Mar. 22 (1 hour).....  | 3.97 |
| 1908—May 5 (1 hour).....    | 1.00 | Apr. 8 (1 hour).....        | 1.43 |
| Aug. 6 (1 hour).....        | 1.01 | Apr. 8 (1 hour).....        | 2.34 |
| Sept. 11 (1 hour).....      | 1.28 | Apr. 11 (1 hour).....       | 1.37 |
| Sept. 22 (1 hour).....      | 1.00 | May 1 (1 hour).....         | 1.17 |
| Sept. 25 (1 hour).....      | 1.22 | June 21 (1 hour).....       | 1.01 |
| 1909—Jan. 14 (1 hour).....  | 1.00 | July 5 (1 hour).....        | 2.18 |
| Apr. 12-13 (1 hour).....    | 1.00 | July 31 (1 hour).....       | 1.32 |
| Apr. 23 (1 hour).....       | 1.18 | Aug. 20 (1 hour).....       | 1.95 |
| May 26 (1 hour).....        | 1.23 | Sept. 5 (1 hour).....       | 1.09 |
| June 2 (1 hour).....        | 1.17 | Sept. 21 (1 hour).....      | 1.03 |
| Sept. 13 (1 hour).....      | 1.29 |                             |      |

Dates on which 2.50 inches or more of rain fell at New Orleans during 24 consecutive hours. Compiled from records of the U. S. Weather Bureau, covering the period from January 1, 1871, to December 31, 1911.

|                      |       |                       |       |
|----------------------|-------|-----------------------|-------|
| 1871—Oct. 2-3.....   | 2.95  | 1892—Apr. 21-22.....  | 7.49  |
| Oct. 30.....         | 3.04  | Aug. 15-16.....       | 3.85  |
| Nov. 12-13.....      | 2.80  | 1893—Feb. 11-12.....  | 2.72  |
| 1872—Mar. 24-25..... | 4.50  | Apr. 19.....          | 2.88  |
| Nov. 7-8.....        | 4.39  | June 5-6.....         | 3.02  |
| Dec. 18.....         | 2.54  | Oct. 1-2.....         | 2.75  |
| 1873—May 5-6.....    | 3.98  | Nov. 26-27.....       | 3.35  |
| May 20.....          | 3.29  | 1894—Feb. 20-21.....  | 3.59  |
| May 27-28.....       | 4.49  | Aug. 13.....          | 2.58  |
| Aug. 20-21.....      | 4.08  | 1895—Jan. 7-8.....    | 4.06  |
| Nov. 4-5.....        | 2.61  | May 21.....           | 4.56  |
| 1874—Apr. 16.....    | 3.94  | June 17-18.....       | 2.70  |
| July 3-4.....        | 7.52  | Aug. 15-16.....       | 2.67  |
| 1875—Feb. 19.....    | 5.71  | 1896—Sept. 2.....     | 3.73  |
| Mar. 11-12.....      | 2.75  | Oct. 27-28.....       | 2.66  |
| Mar. 29-30.....      | 3.81  | 1897.....             | None. |
| Apr. 20-21.....      | 2.90  | 1878—Feb. 17.....     | 2.78  |
| Aug. 11-12.....      | 2.77  | Sept. 9-10.....       | 3.01  |
| Sept. 25.....        | 5.28  | Sept. 11-12.....      | 2.77  |
| Dec. 4.....          | 3.82  | 1899—June 10-11.....  | 3.68  |
| 1876—Mar. 19.....    | 3.98  | July 25.....          | 2.61  |
| Mar. 27.....         | 3.72  | 1900—Jan. 10-11.....  | 3.12  |
| Apr. 7.....          | 5.51  | Apr. 17.....          | 3.93  |
| May 7-8.....         | 4.09  | Apr. 22-23.....       | 4.84  |
| Nov. 2.....          | 2.61  | 1901—Apr. 17-18.....  | 5.92  |
| Dec. 31.....         | 2.59  | July 13-19.....       | 4.07  |
| 1877—Mar. 1.....     | 3.02  | Dec. 28-29.....       | 2.90  |
| Sept. 17-18.....     | 7.22  | 1902—Mar. 14.....     | 3.11  |
| Oct. 24-25.....      | 2.54  | Apr. 13-14.....       | 3.25  |
| Oct. 29-30.....      | 3.52  | Sept. 23-24.....      | 3.01  |
| 1878—Mar. 9.....     | 2.73  | 1903—Feb. 13-14.....  | 3.63  |
| May 19.....          | 3.54  | Mar. 14-15.....       | 8.66  |
| July 21.....         | 2.74  | Aug. 22.....          | 2.83  |
| 1879—Apr. 16.....    | 2.82  | 1904—Mar. 17-18.....  | 2.92  |
| Aug. 13-14.....      | 2.60  | 1905—Feb. 11.....     | 2.58  |
| 1880—Mar. 8-9.....   | 3.36  | Mar. 19-20.....       | 5.83  |
| 1881—Jan. 3.....     | 2.82  | Sept. 27-28.....      | 3.39  |
| July 3.....          | 3.25  | Sept. 30.....         | 2.57  |
| Nov. 6.....          | 2.99  | Oct. 8-9.....         | 4.30  |
| Dec. 13-14.....      | 2.32  | Nov. 9-10.....        | 2.57  |
| 1882.....            | None. | Dec. 2.....           | 2.72  |
| 1883—Jan. 18-19..... | 3.71  | Dec. 13-14.....       | 3.16  |
| Mar. 24.....         | 2.60  | Dec. 27-28.....       | 4.36  |
| Apr. 7-8.....        | 9.22  | 1906—Sept. 25-26..... | 4.10  |
| June 8-9.....        | 2.68  | 1907—Apr. 21-22.....  | 3.42  |
| 1884—Apr. 5.....     | 2.96  | Apr. 25.....          | 8.76  |
| 1885—Jan. 4-5.....   | 2.62  | May 9-10.....         | 3.19  |
| Sept. 20.....        | 2.78  | May 23-24.....        | 2.98  |
| Sept. 25-26.....     | 3.23  | May 30-31.....        | 5.06  |
| Dec. 12-13.....      | 3.40  | Dec. 21-22.....       | 3.41  |
| 1886—Jan. 14-15..... | 4.28  | 1908—Mar. 22-23.....  | 2.75  |
| Apr. 27-28.....      | 2.72  | May 5-6.....          | 3.40  |
| 1887—June 29-30..... | 5.48  | July 29-30.....       | 3.62  |
| Sept. 26-27.....     | 2.88  | 1909—Feb. 9.....      | 2.63  |
| Oct. 18-19.....      | 3.19  | Apr. 7-8.....         | 4.34  |
| 1888—Feb. 20-21..... | 2.72  | June 2-3.....         | 4.78  |
| Feb. 23-24.....      | 4.21  | Sept. 19-20.....      | 4.45  |
| June 6.....          | 2.86  | Dec. 11-12.....       | 3.69  |
| June 26.....         | 4.44  | 1910—Mar. 10.....     | 3.13  |
| Aug. 14-15.....      | 3.67  | June 24.....          | 2.84  |
| Aug. 19-20.....      | 8.90  | June 26-27.....       | 3.59  |
| Aug. 24-25.....      | 2.80  | July 3-4.....         | 2.57  |
| Oct. 22-23.....      | 4.13  | Aug. 24-25.....       | 2.06  |
| 1889—June 26.....    | 2.86  | 1911—Mar. 22.....     | 4.16  |
| June 30.....         | 2.76  | Apr. 8.....           | 4.37  |
| 1890—June 22-23..... | 3.08  | Apr. 25-26.....       | 3.88  |
| Oct. 15-16.....      | 2.63  | July 5.....           | 2.71  |
| 1891—Feb. 14-15..... | 2.60  | Nov. 27.....          | 2.52  |
| Dec. 14-15.....      | 2.92  | Dec. 19-20.....       | 2.85  |
| 1892—Jan. 10-11..... | 2.85  |                       |       |

## OPELOUSAS, LA.

(St. Landry Parish. Elevation, 83 feet.)

Ten inches, or more, in one month.—1886: June, 10 inches. 1892: June, 11.41 inches; July, 13.14 inches. 1897: August, 10.56 inches. 1903: February, 10.05 inches; March, 13.94 inches. 1905: February, 12.69 inches; April, 11.07 inches. 1906: March, 14.61 inches. 1907:

May, 29.70 inches. 1908: July, 16.73 inches. 1909: August, 10.23 inches. 1910: July, 11.88 inches. 1911: July, 11.79 inches; December, 15.19 inches.

Four inches, or more, in 24 hours.—1900: December 28, 5.03 inches; 1901: August 21, 4 inches. 1905: April 25, 4 inches; May 22, 5.20 inches. 1906: March 19, 4.30 inches. 1907: May 8, 6.20 inches; May 24, 4.35 inches; May 30, 4.25 inches. 1908: May 17, 5.26 inches; July 31, 4.12 inches. 1909: August 3, 5.35 inches; September 21, 5.54 inches.

## PLAIN DEALING, LA.

(Bossier Parish. Elevation, 268 feet.)

Ten inches, or more, in one month.—1892: December, 13.35 inches. 1898: June, 14.56 inches. 1902: June, 12.52 inches; July, 15.42 inches. 1904: December, 10.47 inches. 1905: June, 11.39 inches; December, 10.05 inches. 1908: May, 13.13 inches. 1909: December, 10.09 inches. 1911: April, 10.70 inches. 1912: March, 12.04 inches.

Four inches, or more, in 24 hours.—1892: December 12, 4.50 inches; December 16, 4 inches. 1896: September 25, 4.40 inches. 1898: June 16, 6.08 inches; November 9, 4.13 inches. 1902: June 27 and 28, 10.11 inches; July 20, 6.05 inches; July 31, 4.75 inches; 1904: December 26 and 27, 8.92 inches. 1905: June 27, 4.63 inches. 1907: April 28, 4.31. 1908: May 13, 6.16 inches. 1912: March 23, 5.30 inches.

## RAYNE, LA.

(Acadia Parish. Elevation, 44 feet.)

Ten inches, or more, in one month.—1892: June, 12.13 inches; July, 13.53 inches. 1898: June, 11.90 inches; September, 14.90 inches. 1899: December, 10.87 inches. 1904: July, 11.31 inches; August, 10.25 inches. 1905: April, 10.96 inches; June, 14.13 inches; July, 13.29 inches. 1907: May, 23.17 inches. 1908: July, 10.97 inches. 1910: July, 10.22 inches. 1911: December, 11.27 inches.

Four inches, or more, in 24 hours.—1896: July 6, 5.20 inches. 1897: August 20, 4.20 inches; November 28, 4.10 inches. 1898: January, 19, 6.14 inches; September 30, 8.31 inches. 1900: January 11, 5.88 inches. 1902: September 29, 4.40 inches. 1904: July 27, 4.95 inches; August 10, 4.20 inches. 1905: April 25, 5 inches. 1907: May 8, 4.10 inches; May 10, 4.11 inches; May 29, 4.57 inches.

## ROBELINE, LA.

(Natchitoches Parish. Elevation, 147 feet.)

Ten inches, or more, in one month.—1897: December, 14.60 inches. 1900: April, 11.55 inches. 1905: April, 11.46 inches; July, 10.86 inches. 1906: July, 12.96 inches. 1907: May, 10.15 inches. 1909: May, 11.36 inches. 1910: May, 13 inches. 1911: July, 11.80 inches; December, 13.31 inches.

Four inches, or more, in 24 hours.—1900: February 28, 4 inches. 1901: April 11, 4 inches; September 15, 6 inches. 1903: August 12, 4 inches. 1906: July 10, 5.45 inches. 1909: May 25 and 26, 6.89 inches. 1910: May 20, 5.75 inches. 1911: July 18 and 19, 4.85 inches.

## RUSTON, LA.

(Lincoln Parish. Elevation, 312 feet.)

Ten inches, or more, in one month.—1898: June, 13.26 inches. 1900: April, 12.45 inches. 1905: July, 10.35 inches. 1908: July, 10.15 inches.

Four inches, or more, in 24 hours.—1900: April 16, 5.05 inches. 1904: December 26, 4 inches. 1906: May 4 and 5, 4 inches; November 20, 4.30 inches. 1908: July 20 and 21, 4.15 inches.

## SCHRIEVER, LA.

(Terrebonne Parish. Elevation, 17 feet.)

Ten inches, or more, in one month.—1892: June, 11.30 inches; July, 15.37 inches. 1895: July, 11.82 inches. 1896: June, 10.64 inches. 1898: September, 11.57 inches. 1900: June, 17.61 inches; July, 11.31 inches. 1901: July, 14.30 inches. 1904: July, 11.67 inches. 1905: October, 11.62 inches. 1907: May, 15.03 inches. 1908: July, 15.66 inches; September, 12.04 inches. 1909: June, 13.55 inches. 1910: July, 10.81 inches. 1911: July, 13.40 inches; August, 14.87 inches.

Four inches, or more, in 24 hours.—1900: April 23, 6.50 inches; June 1, 4.89 inches; June 2, 4.09 inches. 1908: July 30, 6.75 inches. 1909: September 21, 4.83 inches. 1911: April 27 and 28, 4.25 inches. 1912: March 23, 4.84 inches.

## SHREVEPORT, LA.

(Caddo Parish. Elevation, 249 feet.)

Ten inches, or more, in one month.—1874: April, 10.64 inches. 1876: March, 11.67 inches. 1879: April, 10.23 inches. 1880: July, 10.97 inches;

September, 11.61 inches. 1882: July, 11.38 inches. 1884: May, 14.47 inches; December, 15.55 inches. 1885: January, 12.11 inches. 1905: April, 10.97 inches; July, 13.16 inches. 1908: May, 14.11 inches. 1911: December, 10.44 inches.

*Four inches, or more, in 24 hours.*—1902: June 27 and 28, 8 inches. 1904: December 26, 6.87 inches. 1905: March 6 and 7, 4.92 inches; July 23, 8 inches. 1908: May 13 and 14, 8.35 inches. 1911: August 28 and 29, 5.25 inches.

## SUGARTOWN, LA.

(Calcasieu Parish. Elevation, —.)

*Ten inches, or more, in one month.*—1896: February, 11.78 inches. 1899: January, 11.03 inches. 1900: June, 13.27 inches. 1903: February, 13.04 inches; March, 13.90 inches. 1905: April, 10.45 inches. 1907: May, 21.50 inches. 1910: July, 10.94 inches. 1911: July, 12.51 inches; December, 17.49 inches.

*Four inches, or more, in 24 hours.*—1899: January 5, 4.29 inches; January 6, 4.04 inches. 1900: November 19, 4.82 inches. 1902: November 4, 4.44 inches. 1906: November 21, 4.73 inches. 1907: May 23, 4.41 inches; May 30 and 31, 7.18 inches. 1908: February 12, 4.05 inches. 1910: October 4 and 5, 5.07 inches. 1911: July 5 and 6, 5.26 inches; December 14 and 15, 4.01 inches.

## VICKSBURG, MISS.

(Elevation, 247 feet.)

*Ten inches, or more, in one month.*—1841: January, 12.10 inches. 1843: November, 11.30 inches. 1848: November, 10.45 inches. 1866: December, 12.12 inches. 1868: April, 13.01 inches; July, 14.60 inches. 1869: February, 13.69 inches; April, 14.14 inches. 1872: May, 13.23 inches; December, 10.33 inches. 1874: April, 22.74 inches. 1875: March, 14.52 inches. 1876: March, 11.21 inches. 1880: March, 11.27 inches; September, 10.51 inches; November, 14.15 inches. 1882: January, 13.83 inches; July, 10.19 inches. 1883: November, 11.53 inches. 1884: May, 11.76 inches; December, 13.52 inches. 1888: August, 11.10 inches. 1891: March, 10.57 inches. 1896: February, 10.13 inches; December, 13.27 inches. 1899: January, 10.37 inches. 1900: June, 11.33 inches. 1902: March, 12.26 inches. 1903: February, 11.45 inches. 1907: July, 10.88 inches. 1909: May, 11.82 inches. 1911: April, 11.41 inches; December, 13.77 inches.

*Four inches, or more, in 24 hours.*—1899: January 6, 4.46 inches; December 10, 4.22 inches. 1901: January 10 and 11, 7.03 inches; May 25, 4.66 inches. 1907: March 27, 6.32 inches. 1907: July 13, 7.99 inches. 1908: March 22 and 23, 4 inches. 1909: May 25 and 26, 4.92 inches.